

What is claimed is:

1. A ball bearing, comprising:

an inner ring member having double raceway surfaces;

an outer ring member which is concentrically arranged

5 with said inner ring member and has double raceway surfaces corresponding to each raceway surface of said inner ring member;

double row balls which are arranged between the raceway surfaces of each row of said inner ring member and said outer 10 ring member; and

cages for holding said balls in each row,

wherein one cage among these cages comprises a pocket portion for housing said balls, and an annular portion integrally formed with this pocket portion, and

15 wherein said annular portion of said one cage is arranged between a shoulder portion of said inner ring member and a shoulder portion of said outer ring member via a clearance having a radial fine dimension.

2. A ball bearing, comprising:

20 an inner ring member having raceway surfaces with different diameters on a major diameter side and a minor diameter side;

an outer ring member which is concentrically arranged with said inner ring member and has raceway surfaces with 25 different diameters on the major diameter side and the minor diameter side corresponding to each raceway surface of said inner ring member;

double row balls which are arranged between respective raceway surfaces of said inner ring member and said outer ring 30 member; and

cages on the major diameter side and the minor diameter side for holding said balls in each row,

wherein the cage on the minor diameter side among said

cages comprises a pocket portion for housing said balls, and an annular portion integrally formed with this pocket portion, and

5 wherein said annular portion of said cage on the minor diameter side is arranged between a shoulder portion of said inner ring member and a shoulder portion of said outer ring member via a clearance having a radial fine dimension.

3. A ball bearing used in a part where a lubricant passes through an annular space between an inner ring member and an 10 outer ring member, comprising:

an inner ring member having double raceway surfaces; an outer ring member which is concentrically arranged with said inner ring member and has double raceway surfaces corresponding to each raceway surface of said inner ring 15 member;

double row balls which are arranged between the raceway surfaces of each row of said inner ring member and said outer ring member; and

20 cages for holding said balls in each row, wherein one cage among said cages comprises a pocket portion for housing said balls, and an annular portion integrally formed with this pocket portion, and

25 wherein said annular portion of said one cage is arranged between a shoulder portion of said inner ring member and a shoulder portion of said outer ring member via a clearance having a radial fine dimension.

4. A ball bearing used in a part where a lubricant passes through an annular space between an inner ring member and an outer ring member, comprising:

30 an inner ring member having raceway surfaces with different diameters on a major diameter side and a minor diameter side;

an outer ring member which is concentrically arranged

with said inner ring member and has raceway surfaces with different diameters on the major diameter side and the minor diameter side corresponding to each raceway surface of said inner ring member;

5       double row balls which are arranged between respective raceway surfaces of said inner ring member and said outer ring member; and

      cages on the major diameter side and the minor diameter side for holding the balls in each row,

10       wherein the cage on the minor diameter side among said cages comprises a pocket portion for housing said balls, and an annular portion integrally formed with this pocket portion,

15       wherein said annular portion of said cage on the minor diameter side is arranged between a shoulder portion of said inner ring member and a shoulder portion of said outer ring member via a clearance having a radial fine dimension.

5. A ball bearing according to claim 4, wherein an axial end face on a side of the raceway surface with major diameter of 20 said outer ring member is axially closely positioned to the side of the raceway surface with minor diameter of said inner ring member compared with an axial end face of a side of the raceway surface with major diameter of said inner ring member.

6. A ball bearing according to claim 5, wherein a line of 25 action of a bearing portion on the side of the raceway surface with major diameter is inclined towards a bearing portion on a side of the raceway surface with minor diameter.

7. A ball bearing used in a part where a lubricant passes through an annular space between an inner ring member and an 30 outer ring member, comprising:

      an inner ring member having a single raceway surface;  
      an outer ring member which is concentrically arranged with said inner ring member and has a single raceway surface

corresponding to said raceway surface of said inner ring member;

a plurality of balls arranged between raceway surfaces of said inner ring member and said outer ring member; and  
5 a cage for holding these balls,

wherein said cage comprises a pocket portion for housing said balls, and an annular portion integrally formed with this pocket portion, and

10 wherein said annular portion of said cage is arranged between a shoulder portion of said inner ring member and a shoulder portion of said outer ring member via a clearance having a radial fine dimension.